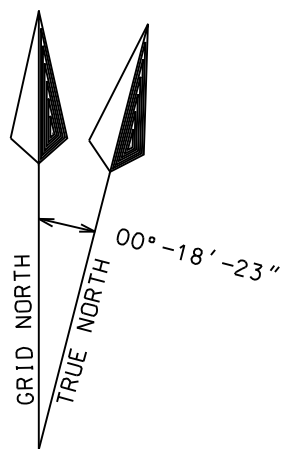
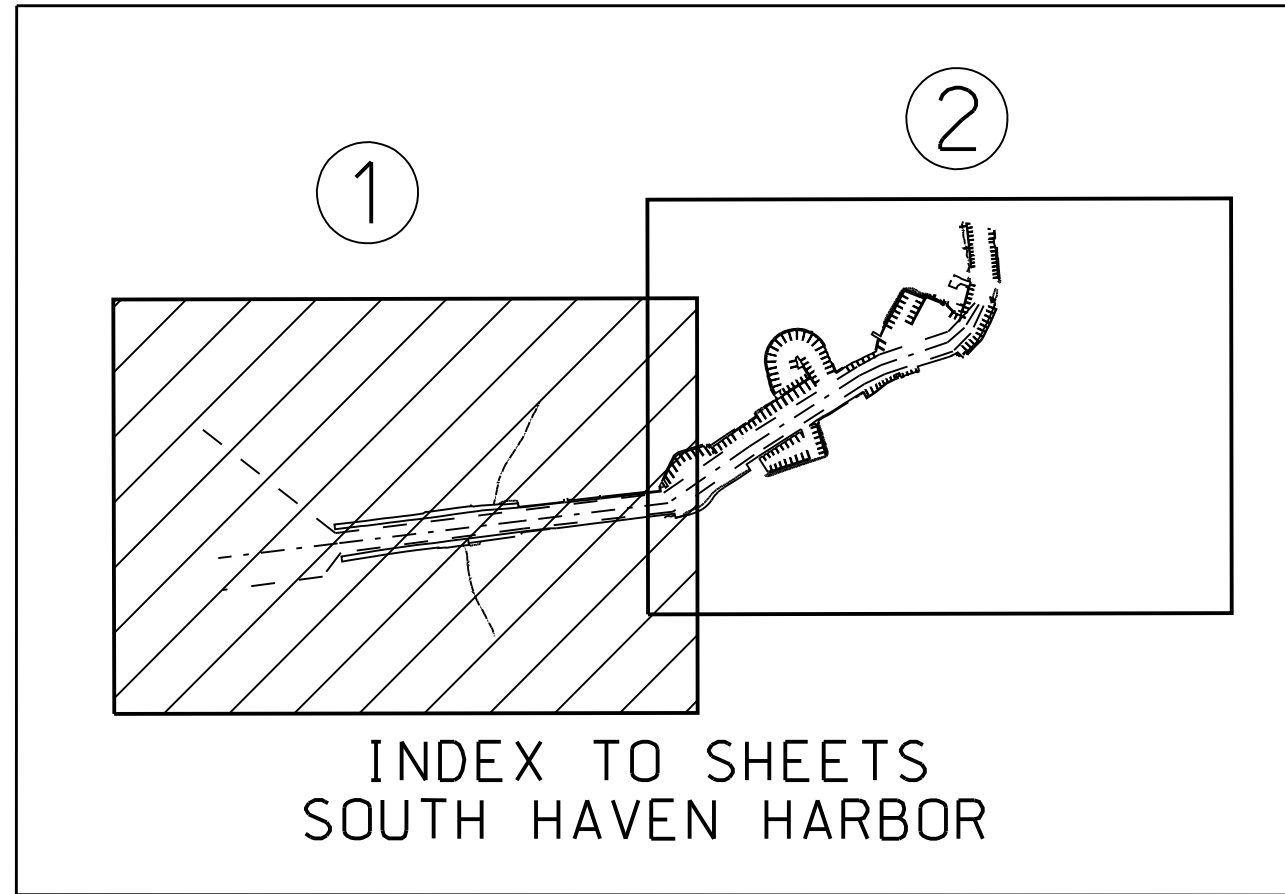


DATE OF PHOTOGRAPHY
12 MAY 1995

E 12603000



E 12604000



E 12605000



100' 0 100' 200' 300'
Scale feet

N 335000

LAKE MICHIGAN

N 334000

MAINTENANCE DEPTH 14 FT.
CHANNEL LIMITS SHOWN THUS: - - - - -
14 FT. CONTOUR SHOWN THUS: - - - - -

CENTERLINE TURNING POINTS		
C/L T.P.	EAST (X)	NORTH (Y)
CL 1B	12,604,390.95	334,508.07
CL 0	12,605,589.44	334,655.29
CL 1	12,606,544.70	334,761.53
CL 2B	12,603,604.36	334,411.44

CHANNEL LINE TURNING POINTS		
CHAN T.P.	EAST (X)	NORTH (Y)
AA	12,603,629.89	334,206.61
BB	12,603,501.54	335,251.45
A	12,604,409.67	334,444.88
B	12,604,372.24	334,571.26
E	12,604,286.54	334,287.27
F	12,605,596.62	334,590.69
G	12,606,568.26	334,698.75
W	12,606,521.14	334,824.31
X	12,605,582.25	334,719.89

SOUNDED ON: 23 SEPTEMBER 2004
POSITIONING METHOD: DGPS, USING C.G. BEACON CORRECTIONS
SURVEY VESSEL: LAUNCH 3033

ALL SOUNDINGS ARE REFERENCED TO I.G.L.D. 1995
FOR LAKE MICHIGAN, ELEVATION 576.8 FT. ABOVE
MEAN SEA LEVEL AT FATHER POINT, QUEBEC.

GRID SYSTEM BASED ON LAMBERT PROJECTION, MICHIGAN
STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (2113)
1983 NORTH AMERICAN DATUM, U.S. SURVEY FOOT.

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS
THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED
AND CAN ONLY BE CONSIDERED AS INDICATING THE
GENERAL CONDITIONS EXISTING AT THAT TIME.

NO.	DATE	REVISION	BY
U.S. ARMY ENGINEER DISTRICT, DETROIT CORPS OF ENGINEERS DETROIT, MICHIGAN			
SOUTH HAVEN HARBOR, MICHIGAN CONDITION OF CHANNEL SEPTEMBER 2004 GRAND HAVEN AREA OFFICE			
DESIGNED BY:			
DRAWN BY:			
CHECKED BY:			
REVIEWED BY:			
SUBMITTED BY:	APPROVAL RECOMMENDED: DATE		
CHIEF, PROJ. OPS. SEC.	CHIEF, DT'S BRANCH		
APPROVED:	SCALE 1" = 100 FT.		
P.E.		CADD FILE NAME	SHEET 1 OF 2
CHIEF, CONST. OPNS. DIVISION		DRAWING NUMBER	